

Binn Eco-Industrial Park Tayside (BEIP): Glenfarg

Presentation: Abertay Centre for the
Environment Eco Partnerships Launch
Event

9th March 2009
(It's Spring time :-)



Content

- Define the drivers for a new approach to industrial ecology
- Outline the Bin Eco Industrial Park (EIP) Concept.
- Outline the potential value of the EIP approach



What are the drivers for a new approach to waste management?

- Waste or any other source of low grade heat (power stations, refineries etc)
- Eco Industrial Parks on landfill platforms are a growing opportunity
- Environmental and Clean Technology is the fastest growing technology sector in the world. The Shell Step Programme estimates a market greater than \$1 trillion by 2020 – waste is the second largest part of this sector
- Government and EU policy is evolving rapidly
- Sustainable economic development and aiming for self sufficiency at a regional level are primary objectives for BEIP:
 - Renewable energy
 - Food production
 - Value added wastes management



Chart 3: UK Environmental Goods & Services Market by Sub-Sector 2005

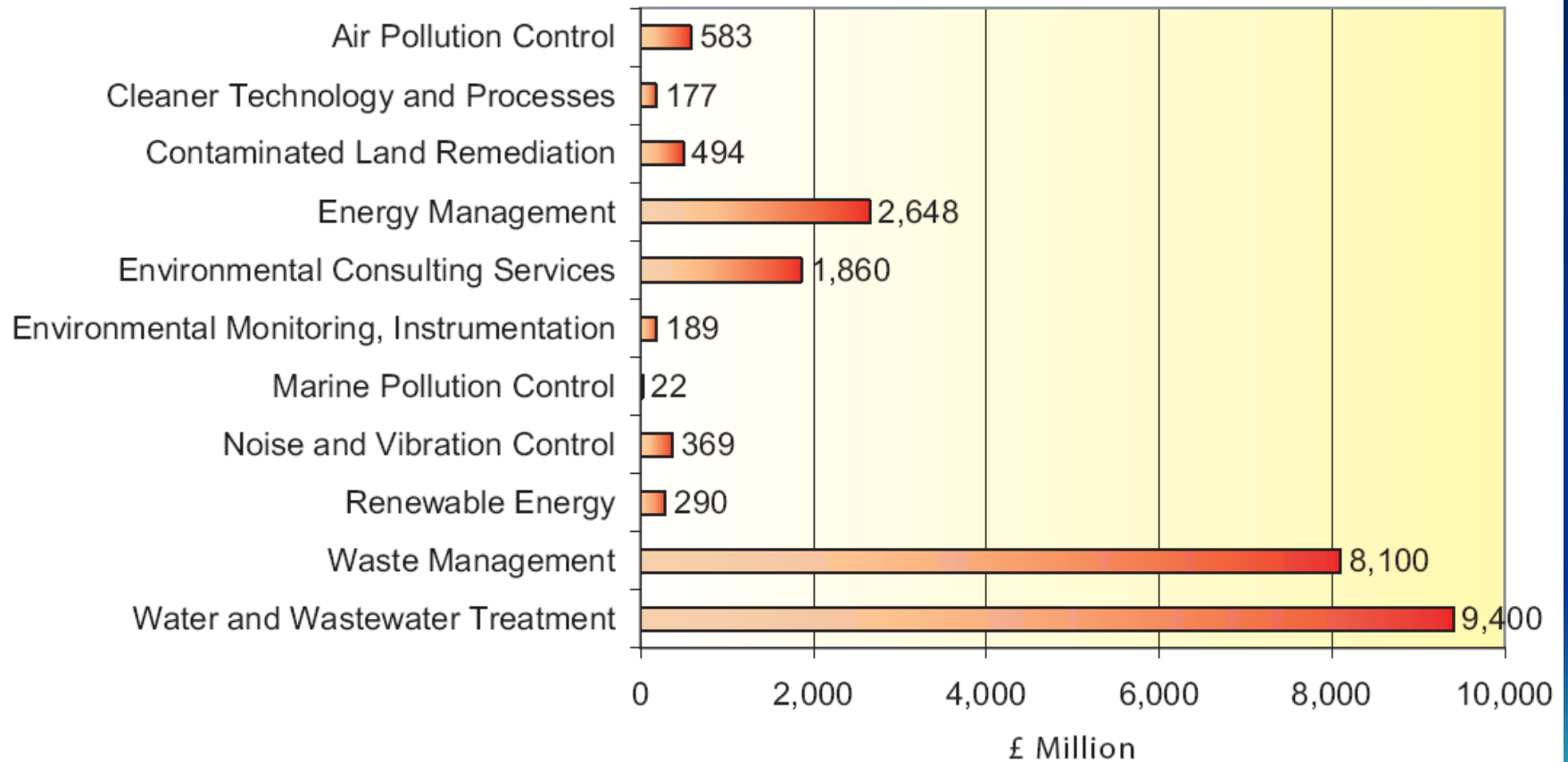
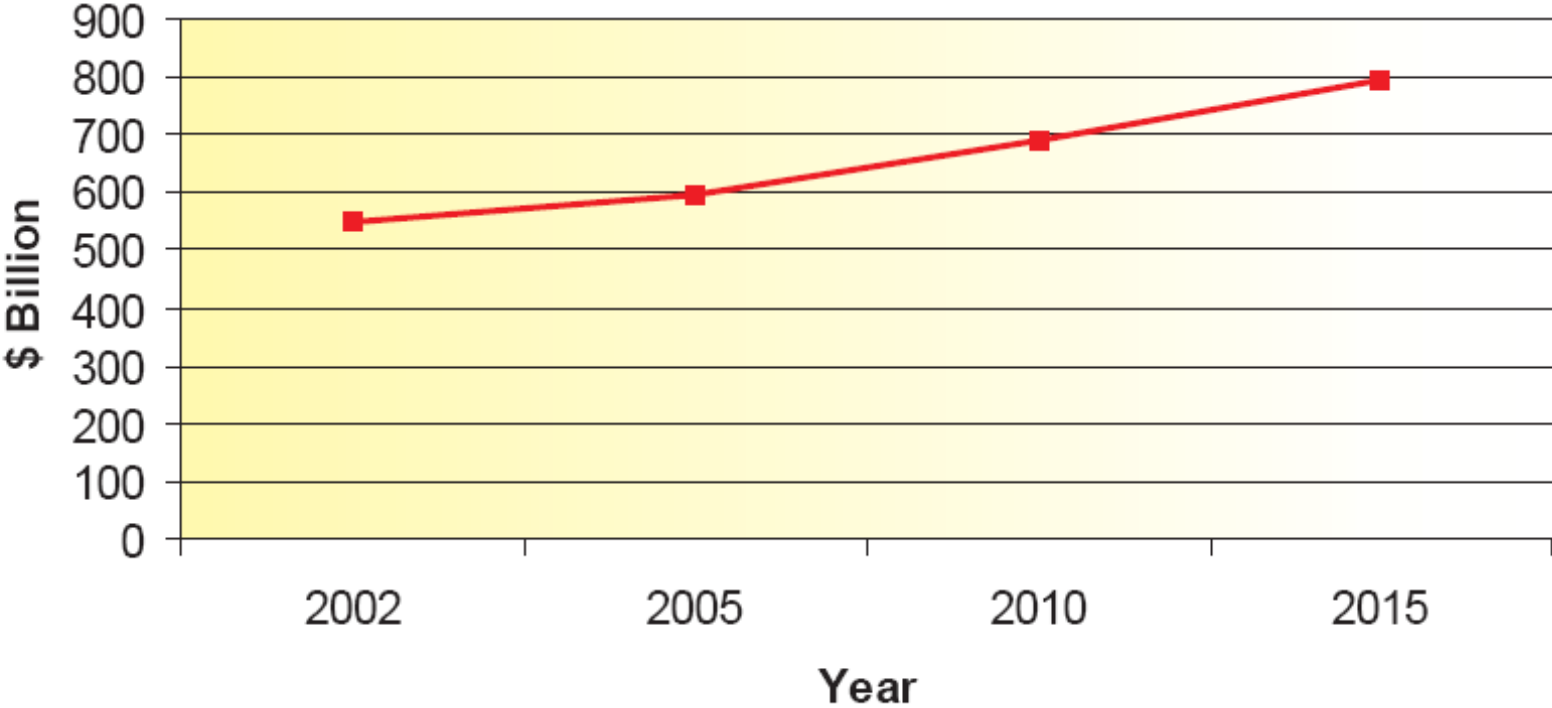


Chart 2: World EGS Markets to 2015



The Binn Eco-Industrial Park concept – 5 themes:

Binn Farm: 2,000 acre agricultural estate with landfill site,
Composting plant and general waste business

1. **Integrated waste treatment and resource use**
2. **Renewable energy: EfW, Wind, Micro-hydro, Wood pellet fuels, Bio-algal diesel (3rd/4th generation fuel technologies)**
3. **Sustainable food production (and other products) – polly tunnels and greenhouses**
4. Incubator for emerging environmental technologies and an Education and Training Centre
5. Driving sustainable and more self sufficient regional economies - research

.....A new approach to waste management bringing about a much wider set of financial, economic, environmental and social benefits.

What makes all of this possible?

- An integrated waste management platform bringing in waste
- Producing waste as a resource to the wider and on site economy
- Producing renewable energy (electrical and heat)
- Using renewable low cost heat as the synergy to drive other businesses on the park: food production and other renewables.



First Steps in the Binn Eco-Industrial Park Development

- Develop the Blueprint for the EIP
- Establish the Development partnership: PKC, Scottish Enterprise and links to academia (ACE/Dundee/Stirling/St Andrews/UHI)
- Establish early projects:
 - Abertay biomass mapping project – energy projects
 - Increased recycling services – evaluation Abertay plastics product manufacturing studies
 - Food and Neutraceutical pilots (ZW Fund application)
 - Energy projects
- Sustainable regional economies research - St Andrews
- Prepare for the other side of the present recession



What are the potential benefits of the BEIP model in Tayside?

- Increased value focus on waste materials
- Adding value to the local economy – a catalytic development for the ‘green economy’
- Developing a transferrable model (note Enviroparks – this is even better as it goes beyond just waste!)
- Contributing to regionalised food and energy self sufficiency and sustainability
- Play global but think local!

